

What is claimed is:

1. A method of driving the coil of an electrohydraulic valve with a PWM drive, comprising:
transmitting a feedback signal to a digitizing device that
is electrically connected to the electrohydraulic
valve;
sampling the feedback signal within the digitizing device
to create a plurality of signal samples;
transmitting the plurality of samples to an accumulator;
averaging the plurality of samples within the accumulator
to create an average value; and
transmitting the average value to a closed loop control
algorithm that generates a pulse width signal to drive
the coil of the electrohydraulic valve.
2. The method of claim 1 wherein the digitizing device is
an AtoD converter.
3. The method of claim 1 wherein the digitizing device is
a DSP.
4. The method of claim 1 wherein the digitizing device is
a micro controller.
5. The method of claim 1 wherein the algorithm is a PI
algorithm.
6. The method of claim 1 wherein the algorithm is a PID
algorithm.

7. The method of claim 1 wherein the accumulator resets when the algorithm sends the pulse width signal to the coil of the electrohydraulic valve.

8. A method of driving a pulse width modulator comprising:

transmitting a feedback signal from the pulse width modulator to a finite impulse response filter; calculating an average current in the signal with the finite impulse response filter; and generating a pulse width signal in response to the average current in the signal via an algorithm.

9. A method of driving the electric coil of a machine with a pulse width modulator comprising:

transmitting a feedback signal to a digitizing device that is electrically connected to the electric coil of the machine; calculating the amount of average current in the coil with the digitizing device; transmitting the average current amount to an algorithm; generating a pulse width signal in response to the average current in the coil with the algorithm.